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File No. 1276/48

B CLASS

P.W. DEPARTMENT

E. BRANCH (1)

Subject:— Electrification
Gajendra gad.
Dist. Dharwar.
Nursery Scheme for —

B/K-7-1951

File No. 1276/48

Std. Sect. Slip 24 A

DOCKET SHEET

Subject:—

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References:—

Date.	To whom sent.	Notes and instructions.
5/10	Regy @ 2/10	Phone her after receiving copies of pp 13-16 (n) 5/10
26/11	J.S.	Issue ER (145-ES)
13/12	File Br	Await (1-3-50)
29/5	J.S.	some letter sent on 1.5.50 res. & back
31/5	File Br	Await (1.5.8.50)
19/12		File (A)
21/6	J.S.	some letter on 1.5.50 C/S & back
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26/4		File (A)

Electrification of Hukeri, Sankeshwar,
Chikodi, Konnur, Gokak and Bailhongal
in Belgaum District.

GOVERNMENT OF BOMBAY.

PUBLIC WORKS DEPARTMENT.

Resolution No. 9622/36.

Bombay Castle, 6th November 1948.

Read Government Resolution No. 6730/36(4), dated the 14th January 1947.

Letter No. Elg. 389/11752, dated the 2nd July 1948, from the Electrical Commissioner with the Government of Bombay as under :—

“Reference : Government Resolution, Public Works Department, No. 6730/36(4), dated 14th January 1947.

“As desired in the Government Resolution, Public Works Department, No. 6730/36(4), dated 14th January 1947, detailed investigations have been carried out for the towns of Hukeri, Sankeshwar, Chikodi, Konnur, Gokak and Bailhongal in Belgaum District.

“2. Following notes, for the electrification schemes of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak and Bailhongal are submitted herewith :—

Note No. 1.—Giving details in general of the proposed diesel electric schemes—one for the towns of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak and the other for the town of Bailhongal.

Note No. 2.—Giving load and other data regarding the electrification of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak.

Note No. 3.—Giving load and other data regarding the electrification of Bailhongal.

A copy of drawing No. DS. 600, enclosed shows the towns to be electrified and the important connecting roads, railways, etc.

“3. The capital costs of both the schemes in Note No. 1 and Note No. 2 are based on the prices of materials known at present. The costs of operation are estimated on the basis of present scales of salaries and wages for staff for running and maintaining the plant and on the basis of market price of fuel oil known at the time of framing the estimate. The cost of operation also includes part of the cost of a sub-division, which will be established for supervision and maintenance of the schemes in both Belgaum and Bijapur Districts ; it also includes part of the salaries of the Accounts staff at Bombay.

“4. The tariff rates adopted in the estimate for the proposed schemes are in line with those previously adopted for the electrification schemes of the towns in Bijapur District, which have since been administratively approved as per Government Resolution No. 8993/36, dated 21st January 1948. The rates proposed are however more favourable than those adopted by most of the other small concerns and are likely to be found acceptable.

“5. It will be noted that there are about 1110 handlooms working at present in the towns of Hukeri, Sankeshwar, Chikodi and Gokak and it is estimated that in the first five years, some 114 handloom as per note No. 2 will be replaced by electrically driven looms. In the town of Bailhongal, about 190 handlooms are working at present, out of which in the first five years it is anticipated that about 40 handlooms as per Note No. 3 will be replaced by electrically driven looms.

As stated in Note No. 1 there is good scope for pump irrigation of lands in the towns under reference. It is anticipated that about 20 pumps as per note No. 2 will be installed in the first five years in the towns of Hukeri, Konnur, Chikodi and Gokak and about 4 pumps as per Note No. 3 in the town of Bailhongal. The above loads have been taken into account on the assumption, that Government will sanction my previously submitted proposal for supplying on hire purchase basis powerlooms and pumps to handweavers and agriculturists respectively. If as a result of the Government policy actively pursued more electrically operated powerlooms and pumps are installed and put into operation, the scheme for the electrification of the towns of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak, which is expected to be self supporting in the 10th year, will become self supporting earlier and that for the electrification of Bailhongal which is showing loss in the 10th year may become self supporting in that year. The estimated maximum demand in the first and tenth year for Hukeri Scheme will be 69 KW. and 305 KW. respectively.

I may further draw the attention of Government to the ten year forecast from which it will be seen that Hukeri Scheme is expected to show a profit of Rs. 10,409 in the tenth year of its working while the Scheme for Bailhongal may show a loss of Rs. 6,109 in the tenth year of its working. If the working of both these schemes is considered together there will be an estimated surplus of about Rs. 4,300 in the tenth year of working.

“6. It may be mentioned that a number of towns in Belgaum District are known for their Rath and Taboot processions, every year. Especially the town of Chikodi is wellknown for its Taboots which are from 20 to 25 feet high. The distribution lines and services which are generally 20 feet above the ground level will have to be temporarily dismantled at the crossings of roads to allow the Taboots to pass through, at the time of processions, which is likely to interrupt the electric supply to the towns at least twice in the year. Alternatively at the crossings of distribution lines along the routes of processions either longer poles will have to be used or lines will be crossed by underground cable. This will increase the cost of lines by about 10 per cent. The crossings of services along procession routes will be avoided by running an underground cable from the distribution lines to the pole fixed on the opposite side of the road from where the services will be tapped. This will practically double the cost of services. The extra cost involved in avoiding the crossings of lines and services is not included in the estimates given in Notes Nos. 2 and 3. It is for

consideration if Government may direct the local revenue authorities to try and persuade the concerned parties either to limit the heights of Rathes and Taboots to about 18 feet or to fix the routes for the processions other than those where distribution lines will be run.

" 7. As pointed out in paragraphs 6 and 7 of my letter which forms a preamble to the above quoted Government Resolution, the prices of plant and machinery are at present high and consequently it was stated that the electrification of various towns mentioned in the letter will involve appreciable deficits for some years. This is confirmed in the figures which have been worked out and submitted in connection with the schemes in Bijapur and Khandesh Districts and are supported by present worked out figures as per Notes Nos. 2 and 3. As, however, electrification will enable increased industrial production from village and small scale industries, the deficits, till the scheme of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak and also the scheme of Bailhongal become self supporting, may be considered as justifiable, nation building expenditure.

" 8. The total capital cost of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak electrification scheme as per Note No. 2 is approximately Rs. 14,07,900 and that of Bailhongal electrification scheme is approximately Rs. 3,52,000. I request that Government be pleased to grant administrative sanction to the Scheme.

" 9. There is a definite tendency for prices to rise, and the delivery periods which are being quoted are unduly long I accordingly request that along with administrative sanction, Government may be pleased to authorise me to purchase direct the plant, machinery etc. stores and equipment, necessary for electrification of Hukeri, Sankeshwar, Chikodi, Konnur, Gokak and Bailhongal in anticipation of technical sanction. This was done in case of Ratnagiri District, Satara and Bulsar Nursery Schemes".

RESOLUTION.—The schemes for the electrification of the following towns in the Belgaum District are approved administratively:—

							Estimated cost.
							Rs.
1. Electrification of :—							
(i)	Hukeri, Sankeshwar, Chikodi, Konnur and Gokak	...	...	...	...	...	14,07,900
(ii)	Bailhongal	...	...	...	...	...	3,52,000

2. The question of permitting the Electrical Commissioner to place orders for the purchase of plant and equipment, required for these schemes will be taken up after the provision for them, which is being proposed as new item of expenditure in the Budget of 1949-50, is sanctioned by the Legislative Assembly.

3. As regards his suggestion either to limit the heights of Rathes and Taboots to 18 feet or to fix the routes for processions other than those where distribution lines will be run, the Electrical Commissioner should take up the matter with the local officers concerned and submit proposals to Government.

4. The cost of the schemes is debitable to the head "81-A.—Capital Outlay on Electricity Schemes—Post-War Reconstruction and Development Programme". No expenditure should be incurred on the schemes during the current financial year.

By order of the Governor of Bombay,

A. G. MAYDEO,
Deputy Secretary to Government.

G.R. No. 9622/36, P. W. D., dated the 6th November 1948.

To

The Finance Department.
The Reconstruction Department.
The Revenue Department.
The Health and Local Government Department.
The Commissioner, Southern Division.
The Collector of Belgaum.
The Electrical Commissioner with the Government of Bombay.
The Superintending Engineer, Southern Circle.
The Electrical Engineer to Government.
The Executive Engineer, Electrical Division and the Electric Inspector, Bombay Province.
The Accountant General, Bombay.

No. of 1948.

Copy forwarded for information and guidance to

NOTE No. 1.

PROPOSED DIESEL ELECTRIC SCHEMES FOR THE TOWNS OF HUKERI, SANKESSHWAR, CHIKODI, KONNUR, GOKAK AND BAILHONGAL IN BELGAUM DISTRICT.

1. Features of the towns—Hukeri.—The town of Hukeri is in Hukeri Taluka and is connected by an all weather road from Gokak to Sanakeshwar. The nearest railway station is Hukeri Road which is about 11 miles to the East of Hukeri. There are two nalas one flowing from East to West through the town and the other touching the West side of the town. The town gets its water supply from three natural springs situated in the town. The total area covered by the town within Panchayat limits is 0.156 of a square mile.

Sanakeshwar.—The town of Sanakeshwar is in Hukeri Taluka and is about 8 miles to the West of Hukeri town. It is a commercial centre situated on the Poona-Bangalore Road and is 32 and 13 miles distance from Belgaum and Nipani respectively. The river Hiranakeshi flows towards the South West of Sanakeshwar and forms a natural boundary between the province of Bombay and Kolhapur State. A nala flows from North to South through the town. The total area covered by the town within panchayat limits is 0.17 of a square mile.

Chikodi.—The town of Chikodi is in Chikodi Taluka. The nearest railway station is Chikodi Road which is about 11 miles to the East of the town. It is connected with many important trade centres in Belgaum District such as Nipani, Sanakeshwar etc., by all weather roads. The town is surrounded from all sides by hills. A nala passes through the town. The total area covered by the town is 0.175 of a square mile.

Konnur.—The town of Konnur is in Gokak Taluka, the nearest railway station being Gokak which is about half a mile to the West of the town. The town is situated on the road connecting Gokak Road station and Gokak Town. The total area covered by the town is 0.05 of a square mile.

Gokak.—The town of Gokak is in Gokak Taluka, the nearest railway station is Gokak Road, which is about 7 miles to the West of the town. The town is connected with the railway station by means of an all weather road which runs along the bedside of the river "Ghatprabha". Gokak being a trade centre is connected with other important towns in Belgaum District by all weather roads. The town covers an area of about 0.36 of a square mile.

Bailhongal.—The town of Bailhongal is in Sampagaon Taluka and is practically a taluka town as the Mamlatdar's office and other Government offices have been shifted to this town from Sampagaon. The town is situated on Belgaum-Saundatti road and is about 27 miles from Belgaum which is the nearest railway station. It is one of the cotton centres in Belgaum District. The total area covered by the town is about 0.386 of a square mile.

2. Population—Hukeri.—The present population of Hukeri is 9,000 as against 7,700 in 1941.

Sanakeshwar.—The present population of Sanakeshwar is 13,000 as against 11,169 in 1941.

Chikodi.—The present population of Chikodi is 12,000 as against 10,700 in 1941.

Konnur.—The present population of Konnur is 7,000 as against 5,000 in 1941. The population of Konnur can be taken as 12,000 if the Gokak mill area which is already supplied with electricity is included.

Gokak.—The present population is 16,000 as against 13,826 in 1941.

Bailhongal.—The present population is 12,500 as against 10,918 in 1941.

3. Scope of electrical development.—The main occupation of the people of the district is agriculture. The main crops are Jowar, Cotton, Bajri, Sugarcane, Tobacco, Chillies and Groundnut. The total number of handlooms in the six towns proposed for electrification is about 1,300; out of which Gokak has 700 handlooms and Hukeri, Sanakeshwar, Chikodi and Bailhongal have 100, 120 and 190 looms respectively. As the demand for cloth is increasing, most of the handloom weavers are eager to increase the production and some of them have shown their willingness to change over their looms to power looms for electric drive. From the local information obtained it is gathered that steps are being taken in Gokak to have silk plantations and some people are already having silk plantation on a small scale. If this is developed, there is likelihood of silk industries being started, which will require electric power in future. The demand however from this source is not taken into account for the purpose of estimating the revenue. As stated elsewhere Bailhongal is one of the cotton centres and there are number of ginning and pressing factories working during seasons having an aggregate output of 700 H.P. These factories are at present run by steam engines and the load being seasonal, is not taken into account in determining the capacity of the diesel plant to be installed. The surrounding areas of Hukeri, Konnur, Gokak, Chikodi are under well irrigation and the main crops are tobacco, sugarcane, bettle leaves, etc.

The Ghatprabha river is provided with a weir at Dhupdal, 3 miles from Gokak falls for irrigation purposes.

When the existing Ghatprabha dam is raised and the silt removed, there may be surplus water available or land irrigation along the bed side of the river and also in the neighbouring villages of Gokak and Konnur. In the beginning there is likely to be some demand for power for well irrigation purposes when the electricity is made available as some people who have already installed engine pumps have expressed their willingness to change over to electric drive.

Besides, there are small scale industrial power plants working in the proposed places. They are at present driven by oil engines with an aggregate output of about 400 H.P. in all the towns excepting Bailhongal and of about 150 H.P. in Bailhongal. A few of these plants are likely to be changed over to electric drive as some of the engines driving these plants are fairly worn out.

4. Electrical load survey.—Note No. 2 gives the approximate load details for Hukeri, Sanakeshwar, Chikodi, Konnur and Gokak. Note No. 3 gives the approximate load details for Bailhongal. These are based on the information obtained from municipalities and other local bodies and public men of the places in question.

5. Cost of Generation.—According to the information obtained some time ago from Diesel oil supply companies, the cost of fuel oil delivered at site would be approximately Rs. 165 per ton and that of lubricating oil be Rs. 3 per gallon.

6. *Tariff*.—The prices of plant, equipment and materials including fuel oil are continuously on the increase and the present high cost may continue for some years more. As such, large amounts have to be set aside for depreciation and interest and the working cost of Diesel power station will also be pretty high for some years. Further the places to be electrified comprise a somewhat backward part of the province and as such the tariff rates are to be so selected, that, they may be accepted to the consumers. The suggested rates are as under :—

(i) *Motive Power*.—Annas 2 per unit for the first 2,000 units per month plus a fixed charge of Rs. 1-12-0 per month per H. P. connected and annas 1½ per unit for the additional units consumed.

(ii) *Lighting*.—For lighting and fans, annas 6 per unit.

In connection with the above rates, it may be mentioned, that most of the electric supply companies in small towns charge at present annas 6 per unit for lighting and from 1½ to annas 3 per unit for motive power plus a fixed charge upto Rs. 3 per B. H. P. connected plus war cost surcharged of 33½ per cent.

7. *Financial details*.—The total initial cost for the scheme of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak as per Note No. 2 will be approximately Rs. 14,07,900 and that for the scheme of Bailhongal as per Note No. 3 will be approximately Rs. 3,52,000. From the estimates given in the abovementioned notes, the anticipated net deficits in the fifth year of working of the schemes will be Rs. 45,538 and Rs. 21,952 respectively. It will further be seen from the statements, giving forecasts of the development of the schemes over a period of 10 years, which are also included in the above mentioned notes, that the scheme of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak is likely to become self-supporting in the 10th year of its working while that of Bailhongal is not likely to become self-supporting even in the 10th year of its working.

It may be noted that the forecasts of developments of the schemes throughout are based on the following assumptions. The rates of fuel oil have been estimated at Rs. 165 per ton for the first year, Rs. 165 per ton minus 5 per cent. for the second year, Rs. 165 per ton minus 10 per cent. for the third, fourth and fifth year. It has been further assumed that the cost of fuel oil prevailing in the 5th year will further be reduced in the 6th, 8th and 10th year by 5 per cent., 10 per cent., and 15 per cent. respectively.

Since the estimates were framed, the price of fuel oil has been further increased by about Rs. 20 per ton. This station owing to the long delivery periods of plant now being quoted, is not likely to be in operation in less than about three years from now on when it is assumed that either fuel and other prices will have come down or higher rates for electric energy and other necessities of life will have to be faced. In view of this, the estimates have been left unaltered being on the basis of fuel costs as indicated above.

8. *Technical details*.—The Diesel station at Hukeri which is proposed to serve the towns of Hukeri, Sankeshwar, Chikodi, Konnur and Gokak with electricity will be equipped with three generating sets—two sets of 100 KW. each and the third set of 200 KW.

The Diesel station at Bailhongal which is proposed to serve the town of Bailhongal with electricity will be equipped with two generating sets—one of 50 KW. and the other of 100 KW.

The station at Hukeri will be complete with HT switch-gear out door step-up transformers, interconnecting cables, power house crane, water cooling arrangement, emergency lighting set and other auxiliaries, etc.

The station at Bailhongal will have similar equipment as above except that no H.T. switch-gear and step up transformer equipment will be installed. The generating supply will be 400/440 volts, three phase, 50 cycles, 4 wire. The area adjoining the proposed generating station at Hukeri and the whole of the area of Bailhongal will be served directly from the respective powerstations at generating voltage. For the remaining areas which will be far away and cannot be economically served from the generating stations, sub-stations at suitable centres will be established. The supply voltage at the generating station at Hukeri will be stepped up to 11 KV. for transmission of energy to the above sub-stations where the voltage will be stepped down again to 400 volts for distribution.

5

Electrification of Dharangaon,
Erandol and Parola in the East
Khandesh District.

GOVERNMENT OF BOMBAY.

PUBLIC WORKS DEPARTMENT.

Resolution No. 9532/36.

Bombay Castle, 9th November 1948.

Read Government Resolution, Public Works Department, No. 6730/36(4), dated the 14th January 1947.

Letter No. Elg. 386/7916, dated the 8th May 1948, as under :—

“Reference: Government Resolution, Public Works Department, No. 6730/36(4), dated 14th January 1947.

“As desired in the Government Resolution, Public Works Department, No. 6730/36(4), dated 14th January 1947, detailed investigations have been carried out for the towns of Dharangaon, Erandol, Parola, Shahada and Shendurni in East and West Khandesh Districts.

“2. In connection with the electrification scheme of Shendurni, reference is invited to this office U.O.R. No. Elg. 200/1080 of 1st November 1947, requesting therein to be informed of the basis of tariff structure to be adopted for working out the financial aspect of the scheme and submitting the same in proper and usual form for further consideration of the Government. The same remarks are also applicable in the case of electrification scheme for Shahada and hence the schemes of Shendurni and Shahada are not included at present. Following notes, for the electrification scheme of Dharangaon, Erandol and Parola are submitted herewith. Note No. 1: Giving details in general of the proposed diesel electric scheme for the towns of Dharangaon, Erandol and Parola, in the East Khandesh District. Note No. 2: Giving load and other data regarding the electrification of Dharangaon, Erandol and Parola. A copy of drawing No. D.S.598, enclosed shows the towns to be electrified and the important connecting roads, railways, etc.

“3. The capital cost of the scheme as estimated in note No. 2 is based on the prices of the materials known at present. The cost of operation is estimated on the basis of present scales of salaries and wages for staff for running the plant and maintenance, and the market price for fuel oil known at the time of framing the estimate. The cost of operation also includes part of the cost of a sub-division which will be established for supervision and maintenance of the schemes in East and West Khandesh Districts.

“4. The tariff rates adopted in the estimate for the proposed scheme are in line with those previously adopted for the electrification schemes of the towns in Bijapur District, which have since been administratively approved as per Government Resolution No. 8993/36, dated 21st January 1948. The rates proposed however are more favourable than those adopted by most of the other small concerns and are likely to be found acceptable.

“5. It will be noted that there are about 2600 handlooms working at present in the towns of Dharangaon, Erandol and Parola and it is estimated that in the first five years, some 255 handlooms as per note No. 2 will be replaced by electrically driven looms. This load has been taken into account on the assumption that Government will sanction my previously submitted proposal for supplying on hire purchase basis powerlooms to hand weavers. If as a result of the Government policy actively pursued more electrically operated powerlooms are installed and put into operation, the scheme for the electrification of the towns of Dharangaon, Erandol and Parola which is expected to be self-supporting in the 10th year, will become self-supporting earlier. The maximum demands in the first and 10th year will be about 67 KW. and 269 KW. respectively.

“6. It may be mentioned here that number of towns in Khandesh Districts are known for their Rath and Taboot processions every year. Especially the town of Parola is well known for its Rath and Vahans which are as high as 35 feet and the Taboot and Rath heights in other places vary from 20 to 30 feet. The distribution lines and services which are generally 20 feet above the ground level will have to be temporarily dismantled at the crossings of roads to allow the Raths, Vahans and Taboots to pass through at the time of processions, which is likely to interrupt the electric supply to the towns at least twice in the year. Alternatively at the crossings of distribution lines along the routes of processions either longer poles will have to be used or lines will be crossed by underground cable. This will increase the cost of lines by about 10 per cent. The crossings of services along procession routes will be avoided by running an underground cable from the distribution line to the pole fixed on the opposite side of the road from where the services will be tapped. This will practically double the cost of services. The extra cost involved in avoiding the crossings of lines and services is not included in the estimates given in note 2. It is for consideration if Government may direct the local revenue authorities to try and persuade the concerned parties either to limit the heights of Raths, Vahans and Taboots to about 18 feet or to fix the routes for the processions other than those where the distribution lines will be run.

"7. As pointed out in paragraphs 6 and 7 of my letter which forms a preamble to the above quoted Government Resolution, the prices of plant and machinery are at present high and consequently it was stated that the electrification of various towns mentioned in the letter will involve appreciable deficits for some years. This is confirmed in the figures which have been worked out and submitted in connection with the schemes in Bijapur District and are supported by the present worked out figures as per note No. 2. As however, electrification will enable increased industrial production from village and small scale industries, the deficits till the scheme of Dharangaon and other places becomes self-supporting may be considered as justifiable nation-building expenditure.

"8. (a) Total capital cost of Dharangaon, Erandol and Parola electrification scheme as per note No. 2 is approximately Rs. 11,47,000. I request that Government be pleased to grant administrative sanction to the scheme.

(b) There is a definite tendency for prices to rise, and the delivery periods which are being quoted are unduly long. I accordingly request that along with administrative sanction, Government may be pleased to authorise me to purchase direct the plant, machinery, etc., stores and equipment necessary for the electrification of Dharangaon, Erandol and Parola in anticipation of technical sanction. This was done in the case of Ratnagiri District, Satara and Bulsar taluka nursery schemes."

RESOLUTION.—The scheme for the electrification of Dharangaon, Erandol and Parola in the East Khandesh District estimated to cost Rs. 11,47,000, *vide* details in the attached statement, is approved administratively.

2. The question of permitting the Electrical Commissioner to place orders for the purchase of plant and equipment in anticipation of technical sanction to the plans and estimates will be considered after the provision for the scheme, which is being proposed as new item of expenditure in the Budget of 1949-50 is sanctioned by the Legislative Assembly.

3. As regards his suggestion either to limit the heights of the Rath and Taboots to 18 feet or to fix routes for the Rath and Taboot processions other than those where distribution lines will be run, the Electrical Commissioner should take up the matter with the local officers concerned and submit proposals to Government.

4. The cost of the scheme is debitable to the head "81-A—Capital Outlay on Electricity Schemes—Post-War Reconstruction and Development Programme." No expenditure should be incurred on the scheme during the current financial year.

By order of the Governor of Bombay,

A. G. MAYDEO,
Deputy Secretary to Government.

G. R., No. 9532/36, P. W. D., dated the 9th November 1948.

To

The Finance Department.
The Reconstruction Department.
The Revenue Department.
The Health and Local Government Department.
The Commissioner, Central Division.
The Collector, East Khandesh District.
The Electrical Commissioner with the Government of Bombay.
The Superintending Engineer, Central Circle.
The Electrical Engineer to Government.
The Executive Engineer, Electrical Division and the Electric Inspector, Bombay Province.
The Accountant General, Bombay.

No. of 1948.

Copy forwarded for information and guidance to

NOTE NO. 1.

Proposed Diesel Electric Scheme for the towns of Dharangaon, Erandol and Parola, in the East Khandesh District.

1. *Features of the towns—Dharangaon.*—The town of Dharangaon is on the Tapy Valley Railway 18 miles off Jalgaon and 16 miles off Amalner. Dharangaon has of the trade centres in the East Khandesh District and is connected by all weather roads with some large towns in the district viz., Erandol, Parola and Chopda. A small *nala* known as Dharani *nala* passes through the town. The area covered by the town is about 1.86 square miles.

Erandol.—The town of Erandol is a taluka town in the East Khandesh District and is situated on the Bombay-Nagpur Road. It is seven miles off Dharangaon and fourteen miles off Parola. The town is situated on either side of the river Ajani, a tributary of the river Girna. It is an old town provided with gates for entrance on the main roads. It covers an area of about 0.45 of a square mile.

Parola.—The town of Parola is situated on the Bombay-Nagpur Road. It is 20 miles off Dhulia and 14 miles off Dharangaon or Erandol. It is an old town of historical importance and is bounded by a wall about 20 feet high damaged at most of the place and is provided with gates on main roads. It covers an area of about 0.24 of a square mile.

2. *Population—Dharangaon.*—The present population of Dharangaon is 22,000 as against 19,840 in 1941.

Erandol.—The present population of Erandol is 15,500 as against 15,098 in 1941.

Parola.—The present population of Parola is 16,181 as against 15,247 in 1941.

3. *Scope of Electrical Development.*—The main occupation of the people in these towns is agriculture. The soil is fairly fertile and the main crops are cotton, wheat, jowar, groundnut and pulses. The total number of handlooms in the three towns is about 2,600 out of which Parola alone has 1,357 looms while Dharangaon and Erandol have 1,000 and 250 looms respectively. As the demand for cloth is increasing, most of the handloom weavers are eager to increase the production and some of them have shown their willingness to change over their looms to powerlooms for electric drive.

Erandol was famous for its paper industry in the past. The industry has been revived lately. There are at present 12 hand made paper factories. Pulp mills may be arranged for electric drive in future. The demand however from this source is not taken into account for the purpose of estimating revenue.

Besides there are small scale industrial power plants working in the towns under reference. They are at present driven by oil engines with an aggregate output of about 760 H.P. A few of these plants are likely to be changed over to electric drive as many of the engines driving these plants are fairly worn out.

4. *Electrical Load Survey.*—Note No. 2 gives the approximate load details for Dharangaon, Erandol and Parola. These are based on the information obtained from municipalities and other local bodies and public men of the places in question.

5. *Cost of generation.*—According to the latest information obtained from diesel oil supply companies the cost of fuel oil delivered at site will be approximately Rs. 165 per ton and that of lubricating oil will be Rs. 3 per gallon. Since the revised rate now quoted for the supply of Diesel oil is much higher than the basic rate of Rs. 90 to Rs. 103-8-0 which suppliers suggested to this office to adopt for the purpose of estimates some time ago, the tariff rates previously taken as the basis for estimates have since been revised to meet the higher cost of fuel oil and that of lubricating oil as well.

6. *Tariff.*—The prices of plant, equipment and materials including fuel oil are continuously on the increase and the present high cost may continue for some years more. As such, large amounts have to be set aside for depreciation and interest and the working cost of Diesel Power Station will also be pretty high for some years. This means the generation and supply of cheap electricity may not be possible for some years. Further the places to be electrified comprise a somewhat backward part of the province and as such the tariff rates are to be so selected that they may be acceptable to the consumers. The suggested rates are as under:—

- (i) *Motive powers.*—Annas 2 per unit for the first 2,000 units per month plus a fixed charge of Rs. 1-12-0 per month per H.P. connected and annas 1½ per unit for the additional units consumed.
- (ii) *Lighting.*—For lighting and fan, annas 6 per unit.

In connection with the above rates it may be mentioned that most of the electric supply companies in small towns charge at present annas 6 per unit for lighting and from annas 1½ to annas 3 per unit for motive power *plus* a fixed charge up to Rs. 3 per B. H. P. connected *plus* war cost surcharge of 33½ per cent.

7. *Financial details.*—The total initial cost for the scheme of Dharangaon, Erandol and Parola as per note No. 2 will be approximately Rs. 11,47,000. From the estimate given in the above mentioned note, the anticipated net deficit in the fifth year of working of the scheme will be about Rs. 33,006. It will further be seen from the statement giving forecast of the development of the scheme over a period of 10 years which is also included in the above mentioned note, that the scheme of Dharangaon, Erandol and Parola is likely to become self-supporting in the 10th year of its working. It may be noted that the forecast of development of the scheme throughout is based on the following assumptions.

The rates of fuel oil have been estimated at Rs. 165 per ton for the first year, Rs. 165 per ton *minus* 5 per cent. for the second year, Rs. 165 per ton *minus* 10 per cent. for the 3rd, 4th and 5th year. It has been further assumed that the cost of fuel oil prevailing in the 5th year will further be reduced in the 6th, 8th and 10th year by 5 per cent., 10 per cent. and 15 per cent. respectively.

Since the estimates were framed, the price of fuel oil has been further increased by about Rs. 20 per ton. This station owing to the long delivery periods of plant now being quoted, is not likely to be in operation in less than about 3 years from now by when it is assumed that either fuel and other prices will have come down or higher rates for electric energy and other necessities of life will have to be faced. In view of this the estimates have been left unaltered—being on the basis of fuel costs as indicated above.

8. *Technical details.*—The Diesel Station at Dharangaon which is proposed to serve the towns of Dharangaon, Erandol and Parola with electricity will be equipped with three generating sets, two sets of 100 KW. each and the third set of 200 KW. The station will be complete with switch gear, interconnecting cables, power house crane, water cooling arrangement, emergency lighting set and other auxiliaries etc.

The generating supply will be 400/440 Volts, three phase, 50 cycles, 4 wire. The areas adjoining the proposed generating station will be served directly from the power station at the generating voltage. For the remaining areas which will be far away and cannot be economically served from the generating station, sub-stations at suitable centres will be established. The supply voltage at the generating station will be stepped up to 11 KV. for transmission of energy to the above sub-stations where the voltage will be stepped down again to 400 volts for distribution.

Grid supply in the Ratnagiri
District:
Sanction to the rates in
respect of the -.

GOVERNMENT OF BOMBAY.
Public Works Department
Resolution No. 9982/36.
Bombay Castle, 29th November 1948.

Read Government Resolution No. 6730/36(4), dated the 13th
October 1947.

Letter No. ELG.397/15365, dated the 23rd September 1948,
from the Electrical Commissioner with the Government of Bombay,
as under :-

"In the financial forecast submitted along with my letter
No. Elg. 331/6075 dated 21st June 1947 forwarding the details of
Capital Expenditure to be incurred for the electrification of
the towns of Ratnagiri, Chiplun, Malvan and Vengurla for technical
sanction, the revenues were estimated at tentative rates mention-
ed therein. I am now submitting herewith, for Government's appro-
val, rate schedules (enclosure I) in a form in which they should
be announced to the public, for lighting and power services. The
proposed schedules incorporate the basic rates specified in the
sanctioned estimates and are in accord with modern practice in
regard to expression of rate formula and the manner of their
application..

Printed as
accompani-
ment to this
resolution.

2. The minor variations are explained here-under.

(a) Schedule RL-1 applicable for metered supply for
lighting and fans.

Block rates are specified to offer lower rates for larger
consumption. This will ensure more equitable application than is
possible with a flat rate. From the information at my disposal,
it would appear that only two large consumers at Vengurla viz.
the Mission Hospital and the Sanitorium will get the benefit of
cheaper blocks at the commencement.

(b) Schedule RL-2 applicable for unmetered supply for Bazar
Lights only.

Rates for 40, 60 and 100 watt lamps have been specified.

(c) Schedule RA-1 applicable for Domestic and Commercial
appliances.

rate
A separate schedule for this type of service has been
designed in accordance with the Licensees' practice to ~~offer~~
offer a special rate for domestic and commercial appliances.

(d) Schedule RP-1 for General Power Service.

The fixed charge has been slightly raised and the first
block has been converted to a load factor block to reward small
consumers for greater use. Net final effect of these minor
changes on the estimated revenue is negligible.

(e) Street Lighting Service.

This class of service will be charged on the basis, suggest-
ed in my letter No. Elg. 328(a)/1460 dated 3rd February 1948 which
is under consideration of Government.

3. A revised financial forecast (Enclosure II) in the 5th

5th year of operation is attached herewith, based on revised load estimate prepared in the light of a field canvass of prospective consumers which has been in progress for some time. For purpose of comparison, corresponding figures in the technically sanctioned estimates are given in a separate column of the forecast statement.

4. It will be observed from the above statement that the estimated maximum demand for power at Ratnagiri in the fifth year of operation will necessitate an increase in the generating capacity of the Power Station. The figures of fixed charges (item 16) at Ratnagiri in the attached statement, therefore, include the additional charges for depreciation and interest on account of the third set which it now seems will have to be installed by that time. Revision in distribution costs to correspond with revised loads in each town has also been made.

5. Since the estimates were accorded technical sanction, fuel oil prices have gone up from Rs.148/-/- per ton to Rs.180/-/- per ton i.e. an increase of over 21 per cent. The revised scale of pay and Dearness allowances recently announced by Government will also have the effect of raising the cost of operation and maintenance by ~~the~~ about Rs.3000/- per annum at each station. Both these factors have been taken into account in the revised financial forecast.

6. As a result of the changes, mentioned above the total over-all deficit in the four towns of the Ratnagiri District in the 5th year of operation is now estimated as Rs. ~~22,22~~ 83,671, as compared with Rs.56,360 indicated in the technically sanctioned estimates of 1947. To maintain status quo a surcharge of about 12 per cent over the basic rates will be necessary.

7. A comparison of the rates proposed for Ratnagiri towns with those charged by Government in the much bigger town of Hubli is attached (Enclosure III). It will be seen that in effect the Hubli rates are some 33 1/3 per cent higher. Also practically all licensees serving small towns levy a surcharge of 33 1/3 per cent over their basic rates which are of about the same level as proposed by me for Ratnagiri towns. I, therefore recommend that in approving the rate schedules sent herewith Government may authorise a surcharge of 33 1/3 per cent to be levied on all energy bills, except street lighting service which is being separately dealt with. If the recommendation is accepted, it is estimated that 5th year operation will result in a net deficit of only Rs.7,214. The situation may however be reviewed after two years operation and the surcharge adjusted according to circumstances then prevailing.

8. I shall be obliged for early orders of Government.

RESOLUTION: The rates, proposed by the Electrical Commissioner with the Government of Bombay, for lighting and power services in the towns of Ratnagiri, Chiplun, Malvan and Vengurla in the Ratnagiri District are approved.

2. The proposal of the Electrical Commissioner to levy a surcharge at the rate of 33 1/3 per cent on all the energy bills except street lighting charges is also approved. The surcharge shall, however, be leviable only so long as it is permitted by Government in the case of those undertakings in the Province, where diesel oil is used for the generation of electrical energy.

By order of the Governor of Bombay,

A. G. Maydeo,
Deputy Secretary to Government.

To..

To

The Finance Department.
The Commissioner, Southern Division.
The Collector, of Ratnagiri.
The Superintending Engineer, Southern Circle.
The Electrical Commissioner with the Government of Bombay.
The Electrical Engineer to Government.
The Executive Engineer, Ratnagiri Division.
The Executive Engineer, Electrical Division.
The Accountant General, Bombay.

No. OF 1948.

Copy forwarded for information and guidance to -

Accompaniment to Government Resolution, Public Works
Department, No. 9982/36, dated the 29th November 1948.

RATES FOR THE SUPPLY OF ELECTRIC ENERGY AT LOW TENSION
RATNAGIRI DISTRICT.

Rate R.L.1. Lighting, fans and small appliances.
(Metered supply)

Rate : 6 as. per unit for first 25 units per consumed per month
5½ " " " " next 100 " " " " "
5 " " " " " 600 " " " " "
4 " " " " all additional consumption
per month.

Minimum Bill: Rs. 1-3-0 per month per installation exclusive
of meter rent.

Rate R.L.2. Bazar Light-burnin, not more than 5 hours
per day.
(Unmetered supply).

Rate: Rs. 2-8-0 per month per lamp of 40 watts or less.
Rs. 3-8-0 " " " " " 60 "
Rs. 5-8-0 " " " " " 100 "

Rate R.A.1. Refrigerators, small cookers and heaters of
not more than 1 H.P. and small motors upto one
H.P. attached to appliances.
(When metered on a separate circuit).

Rate: 3 as. per unit for all energy consumed during the
month.

Minimum Bill: Rs. 4/-/- per month per service.

Rate R.P.1. General Power Service.
(This rate is not available for service between 6 P.M.
and 11 P.M.)

Rate: Fixed charge: Rs. 2/-/- per month per B.H.P. connected
or ~~fix~~ fraction thereof.

plus
Energy charge: 2 as. per unit for first 100 units;
consumed per month per B.H.P.
connected or ~~fix~~ fraction thereof.

1½ as. per unit for all additional
energy consumed during the
month.

Minimum Bill..

Minimum Bill: Payment of the fixed charge whether any energy has been consumed or not.

Meter Rent: Single-phase meter: 8 annas per month per meter.

Three-phase meter: Rs.1/-/- per month per meter.

Delayed Payment Charge: A surcharge of one anna per each rupee of the total bill including meter rent (eight annas or more counting as one rupee for this purpose) will be made for all classes of service mentioned above, if payment is not made within 20 days of the date of billing.

Temporary Supply (for a period not exceeding 15 days).

Lighting, fans and small appliances:

Rate : Same as R.L.1.

Minimum Bill: Rs.15/-/- for period of service.

Meter Rent: Rs.1/-/- per meter for period of service.

Motive Power: Terms will be quoted on application.

VPA.
30/x1/48
KVI
11/2/48

P. W. Deptt.

El.Br.(I).

x

The Elecl. Commr. has submitted for the consideration of Govt.

x Enquiry Sec

1-41-43

the detailed proposals for the electrification of the towns of
 (i) Dholka and Dhanduka in A'bad Distt. (ii) Akluj in Sholapur Distt.
 and (iii) Gajendragad in Dharwar Distt. For the sake of convenience,
 the El. Commr's. proposals have been split up into three parts and
 dealt with in three separate files. The Dholka-Dhanduka electfcn.
 Scheme is dealt with in file No. 1206/48. The Akluj electfcn. Scheme
 is dealt with in file No. 1275/48. These papers deal with the question
 of electrifying the town of Gajendragad in Dharwar Distt.

2. The proposals for consideration are :-

- (a) to accord administrative approval to the scheme of
 electrification of the town of Gajendragad in Dharwar Dist.
- (b) to authorise the El. Commr. to purchase direct the plant and
 machinery, stores and equipment, etc., necy. for the above
 scheme in anticipation of technical sanction.

3. The town of Gajendragad proposed to be electrified is one of
 the 21 towns in respect of which the El. Commr. was asked in G. R.
 No. 6730/36(4), dated the 14-1-1947, to make detailed investigations
 and submit the schemes to Govt. so as to electrify the towns within
 the first five year period of Post war Reconstruction Programme. The
 Elecl. Commr's. letter and Scheme No. 4 and general note, prepared by
 him, are self-explanatory and explain in details his proposals re:
 Gajendragad electfcn. Scheme.

x will be left
up if required

Enquiry Section

1-41-43

A - do -

1-1-34

B - do -

1-1-35-39

4. The total initial cost for electrifying the town of Gajendragad
 will be approximately Rs. 3,38,400. The scheme is likely to become
 self-supporting in the tenth year of its working. The statement on p. 31
 of the correspondence Section gives the financial forecast in this
 connection over a period of ten years.

The El. Commr. assumes that Govt. will sanction his previously
 submitted proposals for supplying on hire-purchase-basis power-looms
 and pumps to hand-weavers and agriculturists and further states that
 if as a result of Govt. policy actively pursued, more electrically
 operated powerlooms and pumps are installed and put into operation, the
 scheme for the electrification of Gajendragad, which is expected to be

self.....

self-supporting/ even earlier. In this con., it is observed that the El. Commr's. proposals re: draft rules for the supply of electrically operated appliances and tools for agriculture and industry on deferred payment system under the Grid Scheme, which are accepted in principle, are under consideration in file No. 7525/36 and necy. orders in the matter will be issued in due course.

in the tenth year, will become self-supporting even earlier.

5. The tariff rates adopted in the estimates for the Gajendragad electrification Scheme are as mentioned below:-

Non-Industrial:- As. 6 + $33\frac{1}{3}\%$ surcharge per unit plus a minimum charge of Rs. 1-8-0 per month per consumer in addition to meter rent.

Industrial:- As. 2 + $33\frac{1}{3}\%$ surcharge upto 100 units per month per B.H.P. connected.
As. $1\frac{1}{2}$ + $33\frac{1}{3}\%$ surcharge for additional energy.

Fixed charge:- Rs. 24/- per year per H.P. connected.

The proposed rates are in line with those adopted for the electrification schemes of the towns in Ratnagiri Dist., approved in G.R. No. 9982/36, dated the 29-11-1948.

6. The Elec. Commr. states that as the electrification will enable increased industrial production from village and small scale industries, the deficits till the Gajendragad Scheme becomes self-supporting may be considered as justifiable nation-building expenditure.

7. In file No. 8535/36(2)/43483, dealing with the review of the El. Grid Scheme, this Deptt. has decided that all nursery Schemes including Gajendragad Scheme should be completed and the present allocation of Rs. 675 lakhs for the Grid Scheme for the first quinquennium should be supplemented by Rs. 360 lakhs. In that connection, the F.D. has observed on the relevant papers that that Deptt. cannot commit itself to provide funds for schemes like Gajendragad, which are still at the investigation stage and that concrete proposals for each scheme, when ready, would be placed before the E.P.C. and if it agrees, funds will be provided for.

x Am. 0 ...

8. In the circumstances, administrative approval may be accorded, in u.o. consultation with the R.C.D. and F.D. to the scheme of electrifying the town of Gajendragad in Dharwar Dist., estimated to cost Rs. 3,38,400.

9. With refce. to para. 2(b) above, it is stated that it has recently been decided in the case of Jog Power Distribution Scheme that purchase of equipment should be made through the Director General of Industries and Supplies and not direct, as proposed by the El. Commr. in this case. His

proposal.....

proposal may not therefore be agreed to and he may be asked to place orders for necy. equipment through the Dir. General of Industries after obtaining necy. technical sanction.

10. The papers may be refd. u.o. to the R.C.D. and the F.D. as proposed in para. 8 above. On return of the papers from those Deptts., necy. draft will be put up for approval and submission.

ASS
5-9-49.

Thro. A.B.(II) & D.E.(I).

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KCJai
5-9-49.

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11. The question of providing funds does not arise at this stage. If para. 9 above is approved, this question will be taken up at the time of according technical sanction to the scheme.

9/16
26-9-49.
1/10
26/10/49

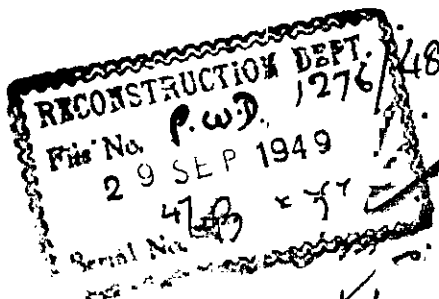
✓
D?

Regarding para 5 of the order on 12/16/48 rates, as surcharge is not leviable after the 1/10/49, the rates proposed will have to be suitably modified.

1/27/9/49

Instead of calling it a surcharge, it will be a straight charge of Rs 8 per unit.

1/27-9-49.



to the R.C.D. & the F.D.
28th Sept 1949.

Recy (71)

RCD
PWD 1276/48

Pl. see remarks on the linked case (No PWD 1275/48) of today's date. These remarks are applicable in the present case also. The pp may be passed on to the PWD

SON
4.10.49
5

LF.
5/10

As

Letter to the FD & S. O. G. 4/69

FD
PWRI

Pl. see the office note on the linked case (No. PWD 1275/48) of today's date. These remarks are applicable to the present case also

not
10/10/49

12/10/49

U. O. & G. P. W. D. dt- 12-10-49

ICE DEPT. RM.
PWRI
6/10/49
2/10

8/10
14/10
P. W. D.
No. 1276/48
Serial No. 67274

then name 2/10
noted for 2/10/49

Pl. see Regd
10/10/49
to P. W. D.

El. Br. IIP. W. D.

These papers, which were put up with New Items proposals, deal with the Gajendragad (Sharwar dist.) electrification scheme. The proceedings on pp 13-16 ante explain the facts of the case. Technical sanction will be accorded to the scheme, which is proposed as a new item for next year's Budget, after the Legislative Assembly sanctions the reg. provision. In the meanwhile, the scheme may be approved administratively as per draft G.O. put up for approval and submission.

x correct. Section
to 45

lghu
18/11/49
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ASS
18-11-49
P. W. D.
18/11/49

Two: AB(III) & DE(9).

18/11/49

x 8
18/11

Secy

H. R. P. W. D.

21/11

from 23/11

11/11/49

11/11/49

EL. Br. (I)

P.W.D.

Submitted.

2. The El. Commr. with the Govt. of Bombay ^{P.S. (C/S)} requests to supply him with 12 copies of the G.O. No. 1276/48, dated ~~at page 47-52~~ the 28th November 1949. 5 copies of the said G.O. are available which may ^{perhaps} be sent to him.

X PP 117-12 (cls).

Yes, and inform the El. Commr. that no more copies are available.
J.S.
19/3/50

MMW.
17.3.50.

J.S.

EL. Br. (I)

P.W.D.

MD
27/3

The necessary memo ~~under~~ No. 1276/48-EL(I), dated the 28th March 1950, ~~has~~ ^{has} been issued.

MMW.
27.3.50.

421
27/3/50

Issued
28/3/50

same & Govt.
27/3

S. L. K.

---, M.L. (C/S)
3/5

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the...

P.W. Dehl.

Resubmitted with reference to ^{p17} ON. of the
 23-11-1949 and para 2 of G.R. No. 1276/48,
 of the 23-11-1949.

2. Provision for the scheme of electrification of
 Gajendragad in Dharewar Dist. which was
 proposed as a new item of expenditure in the
 budget estimates for the current year was not
 admitted. No provision for the scheme accordingly
 exists in the current year's budget estimates.
 It will again be necessary to provide for
 this scheme as new item in the next year's
 budget estimates and the Elec. Commr. may
 be advised to include it accordingly in his
 budget estimates for the next year

Thro' AB (II)

6/5/50

3. A new item was put up for the scheme
 of electrification of Gajendragad by this Dept for
 the budget for 1950-51.
 But it was classified 'B' i.e. postponed for
 the present in the Secretaries' meeting.

10/5/50

11/5/50

am L
 12/5/50

1276/48/67274

20

El. Por. (1)

P.W.D.

Resubmitted with reference to o.v. of the 11-5-50, overleaf.

2. The E. lecl. Commr. may be informed as per
PSS. PS
draft put up for approval.

m p me -
25/5/50

//
20/5/50
25

J. H. A. B. (II)

28/5/50
26/5/50

(15)

D.S.

4/7/50

→ m L
C.P.E. 8.00,
9/12

El. Br. (I)P.W.D.

PSS-ES.

Resubmitted with reference to G.O. Dated
the 29-5-50.

2. The scheme of electrification of Gajendra-
gad in Dharwad Dist. has been postponed
due to financial stringency. These papers may

be recorded

Shro A B-III

~~DS~~
18/12/50
15/6/50

D.S.

K/8/12

K. Por.P.W.D.

Please see letter ^{p57 es} dated the 12-3-51
from Shri A.J. Dodamati, M.L.A and
H.M's orders. Merem.

2/- The scheme for electrification
of the town of Gajendragad in Dharwar
Dist. estimated to cost of Rs. 3,38,400/-
has been administratively approved
in G.R. ^{p47 es} NO 1276/48, dt. the 28-11-49. Provision
for the scheme was made as a
new item in the budget estimate
for 1950-51. The item was however classed
as 'B' and the provision was not
admitted finally. No provision has also
been made in the current year's
budget estimates due to financial
stringency. Shri Dodamati may be
informed as per draft ^{p59 es} put up for -
approval.

Thw' B. Por

K. Por.
12-4-51

16/4/51

DS

4/7/4/51

41
17/4/51

Jm wⁿ 5/51

Seey

9
17/4

1.6.51

H.M.

11/4/51

NOTE NO. 5.

SCHEME NO. 4.

DIESEL ELECTRIC NURSERY SCHEME

FOR THE TOWN OF

GAJENDRAGAD.

(Bharwar District)

Main Estimate.

Estimate framed in the office of the Electrical Commissioner with the Government of Bombay of the probable expense that will be incurred in the electrification of Gajendragad in Dharwar District.

Rupees Three Lakhs thirty eight thousand
four hundred only.

Rs. 3,38,400/-

HBK/29.VII.49.

Note No. 5.

1. Name of Town, Taluka, District & Division.
:Gajendragad, Ren. Taluka, Dharwar Dist. (South Division).
2. Population in 1941.

COLUMBIA RIVER FISHERY, UNARWAR DIST., (South Division).

: 11,145 : 3% Increase.

:Hand weaving and ground nut industry.

K.W. Night.
Day.

• per day/year

2184 Hrs/Year.

KWH/Yr

4368.

2184 Hrs/Year. 4368.

a. 6 Hrs./day for 300 days	900
b. 4 Hrs./day for 300 days	864

any for 300 days 864.

6.00	5 Hrs./day for 365 days	10950.
6.00	4 Hrs./day, for 365 days.	8760.

8762

a. 6 Hrs./day for 240 days.	1440.
b. 4 Hrs./day for 365 days.	5270.

a. 6 Hrs./day for 180 days.	2700
b. 4 Hrs./day for 365 days.	14016

a. 6 Hrs/day for 240 days.	1440.
b. 4 Hrs/day for 365 days.	3066.

Total.....	2000.
	<u>53774.</u>

Probable Lead from Industrial Users.		K.W.		Hrs. Per day/year.	K.W.H./Y
	Day.	Night.			
Brought Forward.					
1. Cotton Mills.	: 5.0	28.66			53774.
2. Gin Presses...	:	-			
3. Looms. 10 connections - 100 looms each $\frac{3}{4}$ H.P. = 75 H.P. with L.F. 80% = 60 H.P. = 45 kW.	: 45.0	-	6 Hrs. a day for 300 days.		81000.
4. Oil Mills .. ~~Hand-operated~~ 24 H.P. = 18 kW. 16 kW. Flour Mills. 112 kW. Rotary oil Mills.	: 6.0	-	6 Hrs. a day for 300 days. 6 Hrs. a day for 180 days.		10300. 12960.
5. Rice Mills.	:	-			-
6. Flour Mills. - ~~Hand-operated~~ - 20 H.P. = 15 kW 16-flour mills. 19-Deer 16 cater.	: 6.0	-	6 Hrs. a day for 300 days. 6 Hrs. a day for 180 days.		10300 9720
7. Agricultural Pumps.	:	-			-
8. Workshops - ~~Hand-operated~~ - Twisting & Doubling 32 H.P. 24 kW 16 flour mills. 18 Twisting & doubling.	: 16.0 18.0		6 Hrs. a day for 300 days. 6 Hrs. a day for 300 days.		10800 32400
Total...		107.0	28.66		222254 ~~222254~~ ~~169,480~~
6. Probable total load immediately.			Day.	Night.	KWH.
7. Probable load in 3, 5 and 10 years and L.F.			: Non-Industrial Load	5.0	28.66
			: Industrial Load.	102.0	179430.
			Total kW.		107 and 28.66
8. Remarks:-			: Assuming Diversity factor to be 60% of day load and 25% of night load.		
			: Super imposed.		
			: Max. Demand by day.		
			64.2 + 7.16.		
			Max. Demand by night.		
			Night load + 25% of day load.		
			28.66 + 25% of 107 = 28.66 + 26.75 = 55.41 kW.		
71.35 kW. suggests an installation of 100 kW & other of 50 kW.					

Proposed Electrification of
GAJENDRAGAD
(Dharwar District).

Item : No. :	Particulars.	: :	Amount.
1	: Diesel Power House Machinery etc.	:	2,52,400.
2	: Transmission and Distribution.	:	48,400.
3	: Transformers, Switchgear, Meters, services Street light fittings etc.	:	41,700.
4	: Testing apparatus.	:	5,900.
----- Total...			: 3,38,400.

HBK/29.VII.49..

Power House Machinery etc.

S.No.	Quantity:	Particulars.	Rate	Per	Amount. Rs.
1	-	:Cost of land to be acquired for :Power Station.	: L.S.	-	8,140.
2	-	:(a)Power Station Building founda- :tions for engines, fencing preparation :of ground including	:	:	51,500.
	1 No.	:(b)Construction of well.	:	:	
3	1 Set.	: Set of fuel oil storage tanks : :5000 gals capacity consisting of : :2 Nos. of M.S.Tanks size 6'-6" : :diam. and 12' long of 1/2" thick : :M.S.plate complete with necessary : :fittings inspecting platforms, : :ladders and 2 Nos.-1 1/2" semi-rotary : :pumps 50' of 1 1/2" metallic flexible : :hose, necessary piping and valves : :for connection to service tanks inside : :the power house and set of spare : :valves cocks and gauge glass.	:	:	6,800.
4	1 No.	: 5 Ton capacity Single girder : :hand operated travelling crane : :with hand chain and gearing for : :the travel of the crane and pulley : :blocks complete with a set of : :gantry girders of double run of : :R.S.Js. 10" x 4 1/2" x 25 lbs. 26' : :long and flat bottomed rails 20. : :lbs/Yd.	:	:	5,780.
5	:	: Diesel generating sets complete : :in all respects and with accesseries, : :interconnecting piping tools, and : :spare parts, :	:	:	
	:	:(a) Four stroke - ~~four cylinder~~ , : :600 rpm. coupled with generators : :400/440 V, 3Ø, four wire 50 cycles/ : :Sec.	:	:	
	1 set	-do- 100 kW.	:42500	: Set	42,500.
	1 set.	-do- 50 kW.	:30500	: "	30,500.
6	:	: Coolers and accesseries with : :circulating water pump sets. :	:	:	
	1 No.	:(a) Coolers.	:	:	
	2 Nos.	:(b) Circulating Water pump.	:	:	
	2 Nos.	:(c) Heat Exchangers.	:	:	13,750.
	:	:(d) Pipes valves, fittings etc. :	:	:	
	:	:(e) Well - Pump with necessary : :piping & water Reservoir. :	:	:	
	:	:(a) Single cylinder 4 BHP. 650rpm : :petrol paraffin engine driven : :compressor and emergency lighting : :set complete with all accesseries : :inter connecting pipings, tools : :and spare parts.	: 3600	:Each.:	
	:	:(b)Electrically driven compressor : :with necessary fittings.	: 1000	:	4,600.
8	1 No.	: ~~Stream line filter for lubricating oil~~ filter :capacity 10 1/2 gallons per week.	: 700	:Each.:	700.
9	4 Nos.	:Fire Extinguishers - 2 gallon : :capacity complete with ~~initial~~ : :change and ~~necessary~~	: 110	:Each.:	440.

S.No.:Quantity: Particulars. : Rate : Per : Amount.
Rs.

10	:	:3 x 400 M/230 V switch-Board	:	:	:	
		:complete with steel structures	:	:	:	
		:and instruments circuit breakers,	:	:	:	
		:switches, synchronizing equipment:	:	:	:	
		a) of 4 pannel board.	:	:	:	16,000
		b) Quick-acting voltage regulator:	:	:	:	1,500
		for 3 x 400 M/230 V system with	:	:	:	
		Accessories.	:	:	:	
11	:	:a) Set of inter connecting cables:	:	:	:	3,000
12	:	:d) Lighting of Power Station and	:	:	:	
		out door yard.	:	:	:	1,500
13	:	:e) Work shop equipment.	:	:	:	5,700
14	:	:f) Earthing.	:	:	:	1,000
15	:	:g) Transport.	:	:	:	3,000
16	:	:h) Erection including labour.	:	:	:	5,500.

2,05,210.

Contingencies 5% (excluding:
cost of land).

: : : 10,260

Total amount.

: 2,15,470.

i) Works establishment 2%.

ii) Tools and plants 1½%.

26,934.

iii) Supervision & General
Charges 8½%.

Total... : 2,42,404.

Say... 2,42,400.

Sub-Estimate No.II.

Gajendragad.

Transmission & Distribution.

S.No.:	Quantity:	Particulars.	Rate :	Per :	Amount
1.	:	: L.T.line with 5"x3"x11 lbs.R.S. :			
		:Js. 30' for tangent locations & :			
		:60 lbs./Yd. rails 30' long for :			
		:angles and dead ends 150' span :			
		:with 3 Nos. of 2 SWG. and 1 No.of:			
		:4 SWG. copper wire x for phase & :			
		:Neutral of L.T.Feederxx One No. :			
		:of 8 SWG. copper wire for street :			
	:1.25	:lighting main.			
	: miles. :		: 14415: Mile:		18,019
	:	:Same as item No.1 except that L.T:			
		:Feeders to be with 3 Nos. of 4 :			
		:S.W.G. for phases and one of 6 :			
	:0.6	:S.W.G. for Neutral.			
	: mile. :		: 12511: Mile:		7,506
	:	:Same as item No.1 except that L.T:			
		:feeders to be with 3 Nos.of 6 SWG:			
		:copper with and one number of :			
	:0.9	:8 SWG. for neutral.			
	:mile. :		: 11065: Mile:		9,958
	:	:Same as item No.1 above except :			
		:that 1 No. of 8-SWG. wire for, :			
	:0.7	:Street light.			
	:mil-		: 8064: Mile:		5,645

					41,128
					2,056

					43,184
					864
					651
					3,671
					48,370
					48,400.

Transformers, Switchgear, Meters, House Services etc.

Sr.N.	Quantity	Particulars.	Rate	Per	Amount.
			Rs.		Rs.
<u>:Special Structures.</u>					
1	: 6 Nos.	:Road Crossing.	: 125	:Each.:	750.
	: 1 No.	:Take off structure near Power Station.	: 1500	: " :	1500.
	: 2 sets	:L.T.Lightning Arresters.	: 40	: " :	80.
		: Transport & Erection.	: L.S.	:	500.
2	:	<u>:Street Light Fittings:-</u>			
	:50 Nos.	:Street light fittings erected.	: 30	:Each.:	1500.
3	:	<u>:Service-connections:-</u>			
	: 219	:(i) House service connections.	: 90	:	19700.
	: 50	:(ii) Bazar services "	:120	:	6000.
	: 14	:(iii) Power services "	:245	:	3430.
4	:	<u>:Tools.</u>			
		: Standard line man's Tools in Bo 92:	L.S.:	:	2000
Total...					35470

Contingencies 5%....

1773
37243

2% works Establishment.

744

1 1/2% Tools and Plants.

558

8 1/2% Establishment & General Charges.

3165

Total... 41710

Say. 41700.

Sub-Estimate No.IV.

Gajendragad.

Testing Apparatus.

S.No.:	Quantity:	Particulars.	: Rate :	Per :	Amount.
1	: 1, Set.	: Set of testing instruments.	:	: Set :	5,000
		5% Contingencies.	:	: :	<u>250</u> 5,250
		2% Work estab.			
		1 1/2% Tools & Tackles.	12%.		630.
		8% Supervision Est. & H.O. Charges.			
					Rs. 5,880
					Say Rs. 5,900.

HEK/29.VII.49.

Depreciation and Interest.

Gajendragad.

S.No.:	Particulars.	Capital in Rs.	Amount of depreciation Rs.
1	a) Power House Building, Fuel storage tank: : -s, water cooling plant. S.F.O.03722	67,750	2,521
	b) Diesel generating sets, compressor pump: : the cooling plant, ~~screen line~~ filter : for lubricating oil, well pump, voltage : regulator. S.F.O.05377.	90,600	4,871
	c) L.T.Switch board, cables, station light: : -ing central workshop equipment fire : extinguishers, earthing. S.F.O.03722.	29,640	1,103
2	:Transmission & Distribution lines and : structures S.F.O.02743	49,658	1,362
3	:Meters ... S.F.O.05377.	11,946	642
4	:Services street light fittings, tool box. S.F.O.03722	20,774	773.
			11,272
	Interest on the capital of Rs.338400 @ 3½% per year.		11,844.
			23,116.

Cost of operation and supervision including that
of transmission and distribution.

I Power House Staff.

		Rs. p.m.
1 Junior Engineer	....	175/-
1 Power House Foreman.	....	105/-
3 Engine drivers.	....	240/-
3 Switch board operators.	....	135/-
1 Fitter.	....	80/-
3 P.H.Cleaner.	....	97/8/-
1 Chokidar - Mali.	....	32/8/-
1 Stores Laskar.	....	32/8/-
1 Watchman (night).	....	32/8/-
		<u>930/-</u>

i.e. 11,160/- per annum.

II. Transmission and Distribution.

1 Line Foreman.	....	~~125/-~~ 156/-
2 Line men.	....	137/-
1 Wire man.	....	68/8/-
4 Lineman helper.	....	130/-
1 Meter reader.	....	76/-
		<u>516/8/-</u>

i.e. 6198/- per annum.

III. Office Staff:

1 Junior Clerk	....	75/8/-
1 Store Keeper.	....	105/-
1 Peon.	....	32/8/-
		<u>213/-</u>

i.e. 2,556 Rs. per annum.

IV. Over Head Charges to meet the expenses of:

i. Dist. head quarters.	....	1000
ii. Supervision of H.O.	....	500
iii. A/C. Section.	....	500
		<u>2000</u>

Total...	1	-	11,160.
	2	-	6,198.
	3	-	2,556.
	4	-	2,000.
			<u>21,914.</u>

Total --- 21,914 Rs.

=====

Item: No.:	Particulars.	: Amount.
	<u>UNITS GENERATED.</u>	
1	: Probable sale of units in case of non- : industrial load..	: 42,824
2	: Probable sale of units in case of Industrial : Load..	: 1, 79,430
3	: Units required for cooling water motor pump: : -ing set, etc.	: 13,140 : <u>2,35,394</u>
4	: Less due to transmission and distribution : lines 15%.	: 35,310
	Total units generated.	: <u>2,70,704</u>

:COST OF FUEL:

: Fuel consumption per unit generated... : 0.84 lbs.

: Total quantity of fuel oil required for the:
: year = $0.84 \times 270704 = 101.5$ Tons :
2240

: Working cost under this heading. :
101.5 x 180 = 18270 : 18270 Rs.

: Cost in anna per unit generated. :
 $\frac{18270 \times 16}{270704} = 1.08$: 1.08 Anna.

: Cost of lubricating oil Say 600 Gls. :
per year at Rs.3/- gallon. : 1800 Rs.

: Cost per unit = $\frac{1800 \times 16}{270704}$: .106 Anna.

Annual Revenue:Gajendragad.

S.No:	Particulars.	: Amount.
<u>:Fixed Charges:</u>		
:	Interest on capital of Rs.338400 @ $3\frac{1}{2}\%$	: 11,844
:	Depreciation by sinking Fund Method.	: 11,113
:	Total interest and Depreciation..	: 22,957..
:	Fixed charges per unit generated:- $\frac{22957 \times 16}{270704} = 1.36$	: 1.36 Anna
:	Total distribution cost per unit generated: $2.746 \times 1.36 = 4.106$	: 4.106 Anna
<u>:Annual Revenue:</u>		
:	50 - Municipal St.lighting at Rs.36/-each: P.A.	: 1800 Rs.
:	150 - Bazar lights @ As.30/- each P.A.	: 4500 "
:	Domestic load at As.6+ $33\frac{1}{3}\%$ surcharge per unit. 29696 KWH.	: 14848 Rs.
:	219 - Single phase meter at 6/- Rs.each.	: 1314 "
:	14 - Three phase meter at 12/- " "	: 168 "
:	Industrial load at:	
:	(1) $2+33\frac{1}{3}\%$ Surcharge/unit(178080)	: 29680 "
:	(2) $1\frac{1}{2}+33\frac{1}{3}\%$ " " (1350)	: 169 "
:	159 - Fixed charges at Rs.24/- per year H.P: HP Connected.	: 3816 "
		: 56295
<u>5th year working.</u>		
	Total revenue...	: 56295 Rs.
	Less working cost...	: 47337 Rs.
	Balance...	: 8958 Rs.
	Less interest & depreciation.	: 23116 Rs.
	Net loss in the 5th year..	: 14158 Rs.

per ton
throughout the year.

Rs. 4/- unit + 33% surcharge.

Rs. 4/- for first 100 units consumed
per H.P. connected or fraction thereof.
Rs. 1/- for all additional energy consumed
per unit for the month with a surcharge of 33% in
plus fixed charge of Rs. 24/- per H.P. connected.

Year	Probable Revenue.	Probable sale of units.	Total	Lighting P. Power	KWH	KWH	KWH	Rs.	Rs.	Rs.	Rs.	Rs.
	Lighting	Power	Total	Lighting	P. Power	Total	Units generated	Approximate	Amount	Nett profit or loss		
	Rs.	Rs.	Rs.	KWH	KWH	KWH						
1st	22.8	4,492	11278	8,565	59,810	68,375	93,742	35,367	23,116	-42,713		
2nd	46.38	11,231	22556	21,412	119,620	141,032	177,297	40,947	"	-30,276		
3rd	56.7	16,846	27064	32,118	143,544	175,662	217,122	43,647	"	-22,853		
4th	64.1	20,215	30450	38,541	161,487	200,028	245,143	45,627	"	-18,078		
5th	71.35	22,462	33833	42,824	179,430	222,254	270,704	47,337	"	-14,158		
6th	77.06	24,259	36539	46,249	193,784	240,033	291,149	48,777	"	-11,095		
7th	82.77	26,056	39,245	49,674	208,138	257,812	311,595	49,947	"	-7,762		
8th	88.48	27,853	41,951	53,099	222,492	275,591	332,040	51,657	"	-4,879		
9th	94.19	29,650	44,656	56,524	236,846	293,370	352,486	52,827	"	-1,637		
10th	100	31,447	47,362	59,949	251,200	311,149	372,932	54,267	"	+1,426		
		214,511	334,934	549,445				470,310	231,160	-1,52,025		

Data for year 1976/77

ating station.

~~Pages.~~

in 1941.

Approximate length of transmission in miles:

Approximate length of distribution in miles.

Approximate length of combined transmission & Distribution lines in miles.

able night load in kW.

able day load in kW.

able sale of non-industrial units.

able sale of industrial units.

-industrial units per year per head of population (5th year working).

-Industrial units per year per head of population (1st year working).

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

D - GAJENDRAGAD -

(i) Features of the town -

Gajendragad town of Ron Taluka covers an area of about 0.36 sq.mile and is about 32 miles off Gadag, which is a railway station on the Sholapur Hubli route of the M. S. M. Railway and is connected with it by a P.W.D. road for vehicular traffic which temporarily gets interrupted during monsoons until floods in Nallas subside.

(ii) Population :

The present population of Gajendragad town is about 13931 as against 11,145 in 1941, i.e. 25% increase since 1941.

(iii) Scope of Electrical Development :

The main occupation of the people is agriculture and handloom ~~marking~~ weaving. There are about 2000 hand looms working at present and 1/3rd of the population is engaged in handloom weaving. As demand for cloth is increasing, most of the handloom weavers are anxious to increase the production and some of them have shown their willingness to change over to electric drive. There are also small scale motive power loads consisting of flour mills, hullers and ground nut machines aggregating a load of about 105 H.P.. Most of these engines are worn out and entail at present considerable repairs. Some of them are likely to change over their plants to electric drive if electric power is made available.

The town of Gajendragad has its own village Panchayat and ~~at the present~~, they are ~~considering only illumination of the town.~~ *willing to take electricity for st. lights* No processions of tabuts or chariot are being taken out during any part of the year.

(iv) Electrical load survey :-

Note No. 5 gives the approximate load details for Gajendragad. This is based on the information obtained from Municipality and other local bodies and public men of the place.

(v) Cost of generation -

According to the information obtained from the diesel oil supply companies at the time of framing the estimate, the cost of fuel oil delivered at site was approximately Rs. 180/- per ton and that of lubricating oil Rs. 3/- per gallon. If the costs increase, the surcharge will have to be proportionately increased or tariff rates altered if the same revenue forecast is to be adhered to.

(vi) Tariff -

The prices of plant equipment and materials including fuel oil are continuously on the increase and the present high cost may continue for some years to come. As such large amounts have to be set aside for depreciation and interest and the working cost of diesel power station will also be pretty high for some years. Further, the place to be electrified comprises a somewhat backward part of the Province and as such the tariff rates are to be so selected that they may be acceptable to the consumers.

Accordingly the tariff rates proposed to be charged at 33 $\frac{1}{3}$ % surcharge over the rates proposed to be adopted are as under :- (These have been approved by Government, vide G.R., P.W.D., No. 9982/36, dated 29th November 1948, for the places in Ratnagiri District).

(a) Non-industrial :-

Light and fans : As.6 per unit plus 33 $\frac{1}{3}$ % surcharge. The minimum charges apart from meter rent shall be Rs. 1/8/- per month per consumer.

Industrial : ~~As.12/-~~ As.2 per unit plus

plus 33 $\frac{1}{4}$ % surcharge for the first 100 units consumed per month per B.H.P. connected or fraction thereof.

As. 1/6 per unit for all the additional energy units consumed during the month plus 33 $\frac{1}{4}$ % surcharge.

Besides a fixed charge of Rs. 24/- per year per B.H.P. connected or fraction thereof will be charged.

(vii) Financial details :-

The total initial cost for the scheme of Gajendragad town as per note No. 5 will be approximately Rs. 3,38,400/-. From the estimates given in the above mentioned note, the anticipated net deficits in the fifth year of working of the scheme will be Rs. 14,158/-. It will further be seen from the statement giving forecast of the development of the scheme over a period of ten years which is also included in the above mentioned note that the scheme for Gajendragad is likely to become selfsupporting in the tenth year of its working.

(viii) Technical Details :-

The diesel station at Gajendragad which is proposed to serve the town with electricity will be equipped with two generating sets one of 50 kW and the other 100 kW capacity.

The station will be complete with switch-gear, interconnecting cables, power house, crane, water cooling arrangements, emergency lighting sets and other auxiliaries etc..

The generating and distributing supply will be 400/440 volts 3 phase 50 cycle 4 wire.

Originals
in
file no 1206/48.

Copy

41

No. ELC-412/13793
Electric Grid Offices,
Foreshore Road,
Bombay 1; 3/8 July 1949.

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject: Nursery Schemes -
Dholka, Dhandhuka, Akluj and
Gajendragad -
Electrification of -

Reference: Government Resolution, Public Works
Department, No. 6730/36(4), dated 14th
January 1947.

As desired in Government Resolution, Public Works
Department, No. 6730/36(4), dated 14th January 1947, detailed
investigations have been carried out for the towns of Dholka
and Dhandhuka in Ahmedabad District, Akluj in Sholepur Dist-
rict and Gajendragad in Dharwar District. In this connection,
the following notes are submitted herewith.

Note No. 1 :- Giving details in general of the proposed
Diesel Electric Schemes for the towns of Dholka and Dhandhuka
in Ahmedabad District, Akluj in Sholepur District and
Gajendragad in Dharwar District.

Note No. 2 :- Giving load and other data rega ding the
electrification of Dholka.

Note No. 3 :- Giving load and other data regarding the
electrification of Dhandhuka.

Note No. 4 :- Giving load and other data regarding the
electrification of Akluj.

Note No. 5 :- Giving load and other data regarding the
electrification of Gajendragad.

2. The capital costs of all the schemes in Note No. 1 are
based on the prices of materials known at the time of
preparation of estimates for the schemes. The costs of operat-
ion are estimated on the basis of present scales of salaries
and wages for staff for running and maintaining the plant
and on the basis of market price of fuel oil known at the
time of framing the estimates. The cost of operation also
includes part of the cost of subdivision which will be
established for supervision and maintenance of the schemes.
It also includes part of the salaries of the Accounts staff
at Bombay.

3. The ~~am~~ tariff rates proposed to be charged at 33 1/3 %
surcharge over the rates adopted in the estimate for the
proposed schemes, are in tune with those proposed to be
adopted for the electrification schemes of the towns in
Ratnagiri District which have been approved by Government,
Vide Government Resolution, Public Works Department, No. 9982/
36, dated 29th November 1948. The rates proposed are, however,
more favourable than those adopted by most of the small
concerns and are likely to be found acceptable.

4. It will be noted that there are about 1000 and 70
hand-loom working at present in the towns of Dholka and
Dhandhuka respectively and it is estimated that in the first

five

five years some 100 and 10 handlooms, as per Notes No. 2 and 3 respectively will be replaced by electrically driven looms. As stated in Note No. 1, there is good scope for pump irrigation of lands in the towns of Dholke, Dhandhuka and Akluj. It is anticipated that about 16 pumps in Dholke, 6 pumps in Dhandhuka and 26 pumps in Akluj as per Note Nos. 2, 3 and 4 will be installed in the first five years. The above loads have been taken into account on the assumption that Government will sanction my previously submitted proposal for supplying on hire purchase basis power looms and pumps to hand-weavers and agriculturists respectively. If, as a result of the Government policy actively pursued, more electrically operated powerlooms and pumps are installed and put into operation, the schemes for the electrification of the towns of Dholke, Akluj and Gajendragad which are expected to be self-supporting within 10 years, will become self-supporting earlier and that for the electrification of Dhandhuka, which shows deficit in the tenth year, may become self-supporting in that year.

5. It may be mentioned here that a number of towns in Ahmedabad District are known for their Rath and Taboot processions every year, specially, the town of Dholke is well-known for taboot which are from 20 to 25 feet high. The distribution lines and services which are generally 20 feet above the ground level will have to be temporarily dismantled at the crossings of roads to allow the taboots to pass through at the time of processions which is likely to interrupt the electric supply to the towns at least twice in a year. Alternatively, at the crossings of distribution lines along the routes of processions, either longer poles will have to be used or lines will be crossed by underground cables. This will increase the cost of the lines by about 10%. The crossings of services along the procession routes will be avoided by running an underground cable from the distribution lines to the pole fixed on the opposite side of the road from where the services will be tapped. This will practically double the cost of services. The extra cost involved in avoiding the crossings of lines and services is not included in the estimates given in Notes Nos. 2 and 3. However, in line with the Government direction given in para 3 of Government Resolution, P.W.D., No. 9532/36, dated 9-11-1948, and Government Resolution, P.W.D., No. 9622/36 dated 6-11-48 for the schemes of East Khandesh and Belgaum districts respectively, the local officers concerned will be requested, after the schemes under reference are administratively approved, to persuade the parties concerned to either limit the heights of the Rath and Taboots to 15 feet or to fix the routes for the Rath and Taboot processions other than those ~~xxxx~~ where distribution lines will be run and the proposals will be submitted to Government for consideration.

6. As pointed out in paras 6 and 7 of my letter which forms a preamble to the above quoted Government Resolution, the prices of plant and machinery are at present high and consequently, it was stated that electrification of the towns mentioned in the letter will involve appreciable deficits. This is confirmed by the figures which have been worked out and submitted to Government with the schemes in Bijapur, East Khandesh and Belgaum districts and are supported by present worked-out figures as per Notes Nos. 2, 3, 4 and 5. As, however, electrification will enable increased industrial production from village and small scale industries, the deficits till the schemes of Dholke, Dhandhuka, Akluj and Gajendragad become self-supporting, may be considered as justifiable nation-building expenditure.

Electrification of the town
of Gajendragad in Dharwar
District.

Govt. of Bombay.

P.W.D.

Resolution No.1276/48.

(Bombay No. I) 28th November 1949.

Read G.R., P.W.D., No.6730/36(4), dt. the 14-1-47.

Letter No.ELG-412/12793, dt. the 3rd/8th July 1949,

from the Elecl. Commr. with the Govt. of Bombay, as under:-

(Enter)

RESOLUTION :- The scheme for the electrification of the town of Gajendragad in Dharwar District, estimated to cost Rs.3,38,400, is approved administratively.

2. The El. Commr. with the Govt. of Bombay should place orders for requisite machinery, equipment, etc., through the Director General of Industries and Supplies, after the provision for the scheme, which is being proposed as new item of expenditure in the Budget of 1950-51 is sanctioned by the Legislative Assembly.

3. The cost of the scheme is debited to the head "81-A-Capital Outlay on Electricity Schemes-P.W.R. and Development Programme." No expenditure should be incurred on the scheme during the current financial year.

By order of the Governor of B'bay.,

ASB.
17-11-49
Ko

To

The F.D.
The R.C.D.
The R.D.
The H. & L.G.D.
The Commr., S.D.
The Collector of Dharwar.
The Elecl. Commr. with the
Govt. of Bombay.
The Elecl. Engineer to Govt.
The S.E., S.C.
The Ex. Engrs., Northern &
Southern Elecl. Dns.
The A.G., Bombay.

19/11/49

19/11/49

F.D.

-: 2 :-

7. Separate Government orders may kindly be issued for each of the following four schemes :-

- (i) Dholka - Electrification as per details in Note No. 2 attached. Total capital cost : Rs. 6,64,000/- only.
- (ii) Dhandhuka - Electrification as per details in Note No. 3, attached. Total capital cost : Rs. 6,66,850/- only.
- (iii) Akluj - Electrification as per details in Note No. 4, attached. Total capital cost : Rs. 5,61,900/- only.
- (iv) Gajendragad - Electrification as per details in Note No. 5 attached. Total capital cost : Rs. 3,38,400/- only.

8. There is still a tendency for prices to rise and the delivery periods which are being quoted are unduly long. I accordingly request that along with administrative approval, Government may be pleased to authorise me to purchase direct the plant and machinery, stores and equipment etc., necessary for the electrification of Dholka, Dhandhuka, Akluj and Gajendragad in anticipation of technical sanction and further allow me to place orders along with the plant and machinery for the schemes in Bijapur district for which tenders have been received. This was done in case of schemes of Ratnagiri district, Satara and Bulsar Talukas.

Sd/- P. B. Advani.

Electrical Commissioner
with the Government of Bombay.

-4.
VDD.
26/8/49.

A33
29/8/49.

47

Electrification of the town of
Gajendragad in Dharwar District.

Government of Bombay.
Public Works Department.
Resolution No. 1276/48.
Bombay Castle, 28th November 1949.
(Bombay No.1)

-- Read Government Resolution, Public Works Department,
No.6730/36(4), dated the 14th January 1947.

Letter No.ELG-412/12793, dated the 3rd/8th July 1949,
from the Electrical Commissioner with the Government of Bombay,
was under:-

-- "Reference: Government Resolution, Public Works Department,
No.6730/36(4), dated 14th January 1947.

"As desired in Government Resolution, Public Works
Department, No.6730/36(4), dated 14th January 1947, detailed
investigations have been carried out for the towns of Dholka
and Dhandhuka in Ahmedabad District; Akluj in Sholapur District
and Gajendragad in Dharwar District. In this connection, the
following notes are submitted herewith.

"Note No.1:- Giving details in general of the proposed
Diesel Electric Schemes for the towns of Dholka and Dhandhuka
in Ahmedabad District, Akluj in Sholapur District and
Gajendragad in Dharwar District.

"Note No.2:- Giving load and other data regarding the
electrification of Dholka.

"Note No.3:- Giving load and other data regarding the
electrification of Dhandhuka.

"Note No.4:- Giving load and other data regarding the
electrification of Akluj.

"Note No.5:- Giving load and other data regarding the
electrification of Gajendragad.

"2.The capital costs of all the schemes in Note No.1 are
based on the prices of materials known at the time of prepara-
tion of estimates for the ~~xx~~ Schemes. The costs of
operation are estimated on the basis of present scales of
salaries and wages for staff for running and maintaining the
plant and on the basis of market price of fuel oil known at the
time of framing the estimates. The cost of operation also
includes part of the cost of subdivision which will be established
for supervision and maintenance of the schemes. It also includes
part of the salaries of the Accounts staff ~~x~~ at Bombay.

"3.The tariff rates proposed to be charged at $33\frac{1}{3}\%$ surcharge
over the rates adopted in the estimate for the proposed schemes,
are in tune with those proposed to be adopted for the electrifica-
tion schemes of the towns in Ratnagiri District which have been
approved by Government, vide Government Resolution, Public Works
Department, No.9982/36, dated 29th November 1948. The rates
proposed are, however, more favourable than those adopted by most
of the small concerns and are likely to be found acceptable.

"4.It will be noted that there are about 1000 and 70
hand-loom working at present in the towns of Dholka and Dhandhuka

respectively.....

respectively and it is estimated that in the first five years some 100 and 10 handlooms as per Notes No.2 and 3 respectively-will be replaced by electrically driven looms. As stated in Note No.1, there is good scope for pump irrigation of lands in the towns of Dholka, Dhandhuka and Akluj. It is anticipated that about 16 pumps in Dholka, 6 pumps in Dhandhuka and 28 pumps in Akluj as per Note Nos. 2, 3 and 4 will be installed in the first five years. The above loads have been taken into account on the assumption that Government will sanction my previously submitted proposal for supplying on hire purchase basis power looms and pumps to hand-weavers and agriculturists respectively. If, as a result of the Government policy actively pursued, more electrically operated powerlooms and pumps are installed and put into operation, the schemes for the electrification of the towns of Dholka, Akluj and Gajendragad which are expected to be self-supporting within 10 years, will become self-supporting earlier and that for the electrification of Dhandhuka, which shows deficit in the tenth year, may become self-supporting in that year.

"5. It may be mentioned here that a number of towns in Ahmedabad District are known for their Rath and Taboot processions every year, especially, the town of Dholka is well-known for taboot ~~and~~ which are from 20 to ~~25~~ 25 feet high. The distribution lines and services which are generally 20 feet above the ground level will have to be temporarily dismantled at the crossings of roads to allow the taboots to pass through at the time of processions which is likely to interrupt the electric supply to the towns at least twice in a year. ~~Alternatively~~ Alternatively, at the crossings of distribution lines along the routes of processions, either longer poles will have to be used or lines will be crossed by underground cables. This will increase the cost of the lines by about 10%. The crossings of services along the procession routes will be avoided by running an underground cable from the distribution lines to the pole fixed on the opposite side of the road from where the services will be tapped. This will practically double the cost of services. The extra cost involved in avoiding the crossings of lines and services is not included in the estimates given in Notes Nos. 2 and 3. However, in line with the Government direction given in ~~para~~ paragraph 3 of Government Resolution, Public Works Department, No.9532/36, dated 9th November 1948, and Government Resolution, Public Works Department, No.9622/36, dated 6th November 1948 for the schemes of East Khandesh and Belgaum Districts respectively, the local officers concerned will be requested, after the schemes under reference are administratively approved, to persuade the parties concerned to either limit the heights of the Raths and Taboots to 18 feet or to fix the routes for the Rath and Taboot processions other than those where distribution lines will be run and the proposals will be submitted to Government for consideration.

"6. As pointed out in paragraphs 6 and 7 of my letter which forms a preamble to the above quoted Government Resolution, the prices of plant and machinery are at present high and consequently, it was stated that electrification of the towns mentioned in the letter will involve appreciable deficits. This is confirmed by the figures which have been worked out and submitted to Government with the schemes in Bijapur, East Khandesh and Belgaum Districts and are supported by present worked-out figures as per Notes Nos.2, 3, 4 and 5. As, however, electrification will enable

increased.....

49

increased industrial production from village and small scale industries, the deficits till the schemes of Dholka, Dhandhuka, Akluj and Gajendragad become self-supporting, may be considered as justifiable nation-building expenditure.

"7. Separate Government orders may kindly be issued for each of the following four schemes:-

- (i) Dholka - Electrification as per details in Note No.2 attached. Total capital cost: Rs. 6,64,000/- only.
- (ii) Dhandhuka - Electrification as per details in Note No.3, attached. Total capital cost : Rs. 4,66,850/- only.
- (iii) Akluj - Electrification as per details in Note No.4, attached. Total capital cost: Rs. 5,61,900/- only.
- (iv) Gajendragad - Electrification as per details in Note No.5 attached. Total capital cost: Rs. 3,38,400/- only.

"8. There is still a tendency for prices to rise and the delivery periods which are being quoted are unduly long. I accordingly request that along with administrative approval, Government may be pleased to authorise me to purchase direct the plant and machinery, stores and equipment etc., necessary for the electrification of Dholka, Dhandhuka, Akluj and Gajendragad in anticipation of technical sanction and further allow me to place orders along with the plant and machinery for the schemes in Bijapur district for which tenders have been received. This was done in case of schemes of Ratnagiri district, Satara and Bulsar Talukas."

RESOLUTION: The scheme for the electrification of the town of Gajendragad in Dharwar District, estimated to cost Rs. 3,38,400/-, is approved administratively.

2. The Electrical Commissioner with the Government of Bombay should place orders for requisite machinery, equipment, etc., ~~thru~~ through the Director General of Industries and Supplies, after the provision for the scheme, which is being proposed as new item of expenditure in the Budget of 1950-51 is sanctioned by the Legislative Assembly.

3. The cost of the scheme is debitable to the head "81-A-Capital Outlay on Electricity Schemes - Post War Reconstruction and Development Programme". No expenditure should be incurred on the scheme during the current financial year.

By order of the Governor of Bombay,

KJ 7/12 o/c
K. V. Joglekar,
Deputy Secretary to Government. 2 pps

G.R., No.1276/48, P.W.D., Dated the 28th November 1949.

To

The Finance Department.

The.....

-4- 50

The Reconstruction Department.
 The Revenue Department.
 The Health and Local Government Department.
 The Commissioner, Southern Division.
 The Collector of Dharwar.
 The Electrical Commissioner with the Government
 of Bombay.
 The Electrical Engineer to Government.
 The Superintending Engineer, Southern Circle.
 The Executive Engineers, Northern and Southern
 Electrical Divisions.
 The Accountant General, Bombay.

.....

No. of 1949.

Copy forwarded for information and guidance to.

Orders issued in accordance with
 the provisions of the Public
 Works Department, No. 1276/48, dated the 28th November 1949.

Accompaniment to Government Resolution on Public
 Works Department, No. 1276/48, dated the 28th November 1949.

.....

D - GAJENDRAGAD -

(i) Features of the town -

Gajendragad town of Ron Taluka covers an area of about 0.36 square miles and is about 32 miles off Gadag, which is a railway station on the Sholapur Hubli route of the Madras and Southern Mahratta Railway and is connected with it by a Public Works Department road for vehicular traffic which temporarily gets interrupted during monsoons until floods in Nallas subside.

(ii) Population:

The present population of Gajendragad town is about 13931 as against 11,145 in 1941, i.e. 25% increase since 1941.

(iii) Scope of Electrical Development:

The main occupation of the people is agriculture and handloom weaving. There are about 2000 hand looms working at present and 1/3rd of the population is engaged in handloom weaving. As demand for cloth is increasing, most of the handloom weavers are anxious to increase the production and some of them have shown their willingness to change over to electric drive. There are also small scale motive power loads consisting of flour mills, hullers and ground nut machines aggregating a load of about 105 H.P.. Most of these engines are ~~worn~~ worn out and entail at present considerable repairs. Some of them are likely to change over their plants to electric drive if electric power is made available.

The town of Gajendragad has its own village

panchayat.....

-5- 51

Panchayat and they are willing to take electricity for street lights. No processions of tabuts of chariot are being taken out during any part of the year,

(iv) Electrical load survey:-

Note No.5 gives the approximate load details for Gajendragad. This is based on the information obtained from Municipality and other local bodies and public men of the place.

(v) Cost of generation

According to the information obtained from the diesel oil supply companies at the time of framing the estimate, the cost of fuel oil delivered at site was approximately Rs. 180/- per ton and that of lubricating oil Rs. 3/- per gallon. If the costs increase, the surcharge will have to be proportionately increased or tariff rates altered if the same revenue forecast is to be adhered to.

(vi) Tariff -

The prices of plant equipment and materials including fuel oil are continuously on the increase and the present high cost may continue for some years to come. As such large amounts have to be set aside for depreciation and ~~xxxxxx~~ interest and the working cost of diesel power station will also be pretty high for some years. Further, the place to be electrified comprises a somewhat backward part of the Province and as such the tariff rates are to be so selected that they may be acceptable to the consumers.

Accordingly the ~~xx~~ tariff rates proposed to be charged at 33 1/3% surcharge over the rates proposed to be adopted are as under :- (These have been approved by Government, vide Government Resolution, Public Works Department, No.9982/36, dated 29th November 1948, for the places in Ratnagiri District).

(a) Non-industrial:-

Light and fans: As. 6 per unit plus 33 1/3% surcharge. The minimum charges apart from meter rent shall be Rs. 1/8/- per month per consumer.

(b) Industrial: As. 2 per unit plus 33 1/3% surcharge for the first ~~xx~~ 100 units consumed per month per B.H.P. connected for fraction thereof.

As.1/6 per unit for all the additional energy units consumed during the month plus 33 1/3% surcharge.

Besides a fixed charge of Rs. 24/- per year per B.H.P. connected or fraction thereof will be charged.

(vii) Financial details:-

The total initial cost for the scheme of Gajendragad town as per note No.5 will be approximately Rs. 3,38,400/-. From the estimates given in the above mentioned note, the anticipated net deficits in the fifth year of working of the scheme will be Rs. 14,158/-. It

will....

-6- 52

will further be seen from the statement giving forecast of the development of the scheme over period of ten years which is also included in the above mentioned note that the scheme for Gajendragad is likely to become self supporting in the tenth year of its working.

(viii) Technical Details:-

The diesel station at Gajendragad which is proposed to serve the town with electricity will be equipped with two generating sets one of 50 kW and the other 100 kW capacity.

The station will be complete with switchgear, interconnecting cables, power house, crane, water cooling arrangements, emergency lighting sets and other auxiliaries etc.

The generating and distributing supply will be 400/440 volts 3 phase 50 cycle 4 wire."

VMW.
28/11/49
RPA
24/11/49

URGENT
LETTER

5-3

No. E-26/ 2774
Electric Grid Offices,
Foreshore Road,
Bombay 1. 329 March, 1950.

To

The Assistant Secretary to Government,
Public Works Department,
Bombay.

Subject:- Electrification of the town of Gajendragad in
Dharwar District. 8047-52

Reference:- P.W.D. G.R. No. 1276/48, dated 28-11-1949.

Kindly supply this office with 12 more copies of the G.R.
referred to above, as they are required for distribution to
the various officers working under me.

Canchari
for Electrical Commissioner
2/3 with the Government of Bombay.

KRN/2.3.

6/5 6/3 7/2/13

P. W. D.
YES No. 1276/48
Serial No. 17951

md i r

55-

1276/48/67274

No 1276/48-E1(1)

Letter

P. W.D.

B.C. (Bombay) vol

29th May 1950.

To,

The Electrical Commr. with the
Govt. of Bombay.Subject: Electrification of Gajendragad
in Dharwar Dist.Reference: Para 2 of G.R. ^{p-49} P.W.D., No
1276/48, dt the 28-11-49.

2. No provision for the above scheme has been made in the current year's budget estimates as the new item was not admitted. The scheme should not therefore be taken up during the current year. Provision for it should however be proposed as a new item in the next year's budget.

By order of the G. of B.

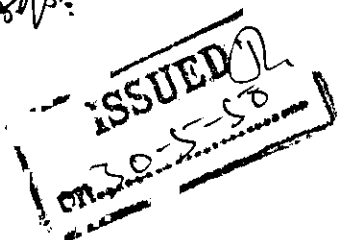
D.H. M.R.

H
25/5/50D.S. to the Govt of B'bay
P.W.D.

Copy for information to -

The Finance Deptt.

The Asst Genl. B'bay.

L. P. M. D.
29/5124
292
378

Bombay,
22nd March, 1951.

From:

A. F. Dodmatl, M.L.A.,

To

The Honourable Minister,
Public Works, Government of Bombay,
Bombay.

Sir,

Gajendragad in Dharwar District is one of the places selected for Grid nursery Scheme. Government has sanctioned other schemes and made provision of money and given orders for machinery for these schemes. Gajendragad has been left out. It is a very important weaving centre in Dharwar Dist. It is, therefore, prayed that it may also be taken along with others and finished with them.

Yours faithfully,

Bombay,
Council Hall,
22nd March, 1951.

2005
 A. J. TAMETI
 M.L.A

ACKNOWLEDGED
No. 11P WD
Date 24/12/77

Shri Andanetta Jnanapita
Post Jakkali (Taluk)
Dist. Dharmavaram

59

1276/48/25955

No. 1276/48-K.

P. W. D.

B.C., (B'bay No I)

23rd April 1951

To

Shri A. J. Doddameti,

MLA

Post : Takkali

Taluka : Ron

District : Dharwar.

Subject: Electrification of Gajendragad

Dear Sir,

I am directed to refer to your letter^{p57} dated the 22-3-51 to the address of H.M. for Public Works and Housing and to state that the scheme for electrification of Gajendragad has been postponed due to financial stringency.

//
16/4/51

Yours faithfully

Dy. Secy. to Govt.

DA: - nil.

Received
25/4/51 //

Sin J
23/4